

## ABSTRACT

5 A high density probe card contact apparatus including  
a support block fitted into an opening in a probe card, and  
holding a plurality of fine tipped needles extending inward  
and below an opening in the center of the block. The needle  
tips are a noble metal integrally connected with a less  
costly conductive metal which forms the more widely spaced  
fingers of the needles, and which terminate in contacts to  
the probe card. Laser etching defines the fine needle  
10 pattern in a thin sheet of the two-metal composition which  
is secured to a polymeric film. The contact apparatus is  
assembled by positioning one or more sections of the polymer  
with needles on the support film.

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